

REMARKS/ARGUMENTS

Claims 1 - 7 are pending. Claim 5 has been amended for clarity. Claims 8 and 10 have been cancelled. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-7 were rejected under 35 U.S.C. § 103(a) over Chuang (U.S. 2003/0161246 A1). Applicant respectfully traverses this rejection on the grounds that the Chuang patent fails to disclose or suggest a holographic apparatus using a conical prism, **the base portion of which faces the holographic medium**. While the Chuang patent does disclose a holographic apparatus using a conical prism or mirror, there is no suggestion that the base portion of the prism should face the medium, as claimed.

The claimed orientation of the conical prism enables the size of the reference beam to be increased, due to the two refraction procedures that light entering the prism undergoes, so that the sizes of the conical prism and reference beam become much smaller than those of the prior art. As a result, the overall size of the holographic storage system can be considerably miniaturized.

In contrast, Chuang discloses a holographic disc recording system in which conical beam shaper 70 is used to transform a collimated beam 26 into a conical beam having a substantially cylindrically symmetrical shape. The beam shaper 70 can be a conical mirror (Fig. 2), a conical prism (Fig. 3), or even an "inverted" conical

prism (Fig. 4). Of these shapes, the only one that corresponds to the claimed conical prism is the one shown in Fig. 1. **However, the prism shown in Fig. 2 has a base that is opposite the disc medium 60, as can be understood from the direction of arrows 150B, which point to the medium (see, also, Fig. 1).** Only the conical mirror has a base that faces the medium. ***Thus, the prism arrangement taught by Chuang is exactly opposite that of the claimed invention.***

Since Chuang fails to teach, or even suggest a conical prism, the base portion of which faces the holographic medium, as recited in claim 1, Chuang is inevitably silent on the desired result of the present invention, which is to reduce the size of the reference beam. In fact, the Examiner will note that Fig. 2 of Chuang shows the same prism arrangement as illustrated in prior art Fig. 1B of the present application, and therefore it is likely that the prism arrangement of Chuan will have the same deficiencies. The Examiner is respectfully invited to compare **Fig. 1B (prior art) of the present application** (showing a conical prism whose vertex faces the medium) with **Fig. 2 of the present application** (showing a conical prism whose base faces the medium) and **Fig. 2 of Chuang** (showing a conical prism whose vertex faces the medium).

Applicant wishes to direct the Examiner's attention to the basic requirements of a prima facie case of obviousness as set forth in the MPEP §2143. This section states that to establish a prima facie case of obviousness, *three* basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine the references' teachings. Secondly, there

must be a reasonable expectation of success. Finally, the prior art references must teach or suggest all the claim limitations. It is respectfully submitted that the Chuang patent does not provide the necessary motivation for the claimed conical prism arrangement, and that such orientation is not knowledge generally available to one of ordinary skill in the art. Accordingly, it is respectfully submitted that claim 1 defines a patentable invention over Chuang and is allowable.

Claims 2 and 7 are believed allowable for at least the same reasons presented above with respect to claim 1 by virtue of their dependence upon claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.


CONCLUSION

Applicant believes that this is a full and complete response to the Office Action. For the reasons discussed above, applicant now respectfully submits that the pending claim is in complete condition for allowance. Accordingly, it is respectfully requested that the Examiner's rejections be withdrawn; and that claims 1-7 be allowed in its present form.

Should the Examiner require or consider it advisable that the specification, claims an/or drawings be further amended or corrected in formal respects, in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case be passed to issue.

Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,
BACON & THOMAS, PLLC

By: 
BENJAMIN E. URCIA
Registration No. 33,805

Date: April 29, 2005

Appl. No. 10/797,118
Amendment dated
Reply to OA of May 17, 2005

BACON & THOMAS, PLLC
625 Slaters Lane, 4th Floor
Alexandria, Virginia 22314
Telephone: (703) 683-0500